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09/477,226	01/04/2000	GEORGE HSU	P413	8873

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CENTRAL COAST PATENT AGENCY  
PO BOX 187  
AROMAS, CA 95004

EXAMINER

KUPSTAS, TOD A

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 02/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/477,226

Applicant(s)

HSU, GEORGE

Examiner

Tod Kupstas

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2153

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, and 13-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Horbal et al. (US 6,112,246) in view of Sandelman et al. (US 6,160,477).

As set forth in claim 1, Horbal discloses a control unit to facilitate remote programming for local control of systems and appliances, comprising: a microcontroller for managing functions of the control unit (see fig. 2, the microserver); an input-output (I/O) section coupled to the microcontroller for interfacing voltage levels between the systems and appliances and the microcontroller; see col. 8, lines 26-39, and element 406; a system memory for storing executable code and data; a wiring interface for connecting input and output points from the control unit to the systems or appliances and microcontroller; see col. 3, lines 34-37; a system memory for storing executable code and data; a wiring interface for connecting input and output points from the control unit to the system or appliance; see col. 5, lines 50-59; with connections made between the wiring interface and the controlled system or appliance, the microcontroller provides outputs to operate functions on the system or appliance in response execution of control code and stored data by the microcontroller; see col. 3, lines 31-35, lines 44-45. Horbal discloses a system

Art Unit: 2153

wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claims 1 and 4, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claims 1 and 4, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 2, Horbal discloses a control unit wherein the microcontroller produces control outputs partly in response to input from sensors on the controlled system or appliance; see figs. 3, the temperature sensor.

As set forth in claim 3, Horbal discloses a control unit further comprising additional sensors in the control unit, wherein the microcontroller produces control outputs partly in response to input from the additional sensors; see col. 8, lines 32-39.

Art Unit: 2153

As set forth in claim 5, Horbal discloses a method for controlling a system or appliance, comprising steps of: (a) connecting a control unit to the appliance by a wiring interface, the control unit comprising a microcontroller for managing functions of the control unit, an input-output (I/O) section coupled to the microcontroller for interfacing voltage levels between the systems and appliances and the microcontroller, a system memory for storing executable code and data, a wiring interface for connecting input and output points from the control unit to the system or appliance, and (c) operating functions on the system or appliance in response to execution of the received control code and data by the microcontroller; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microsensors can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claims 5 and 8, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claims 5 and 8, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As

Art Unit: 2153

Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 6, Horbal discloses a method wherein in step (c) the microcontroller produces control outputs partly in response to input from sensors on the controlled system or appliance; see col. 8, lines 32-39, and fig. 3.

As set forth in claim 7, Horbal discloses a method further comprising additional sensors in the control unit, and wherein, in step (c) the microcontroller produces control outputs partly in response to input from the additional sensors; see col. 8, lines 32-39, and fig. 3.

As set forth in claim 9, Horbal discloses a base station for managing one or more control units, comprising: a microcontroller for managing functions of the base station; system memory coupled to the microcontroller for storing executable code and data needed in base station functions; a communication port for communicating with the Internet; characterized in that the control code and data are sent via the communication port, and transmits the control code and one or more control units for use in controlling systems and appliances; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

Art Unit: 2153

As set forth in claims 9, 11, and 13, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claims 9, 11, and 13, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 10, Horbal discloses a base station wherein the communication port is one of a standard serial or parallel communication port compatible with a personal computer (PC) and wherein the PC handles communication with the Internet for receiving control code and data, and transfers the control code and data to the base station; see figs. 2-5.

As set forth in claim 14, Horbal discloses a method for managing control functions for a plurality of systems and appliances in a home or business area, the systems and appliances connected to control units: (a) identifying each control unit uniquely electronically; (c) downloading control code and data from an Internet site by the base station identified for

Art Unit: 2153

individual ones of the control units, and transmitting the downloaded control code and data selectively to the individual ones of the control units; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claims 14 and 15, Horbal does not discloses a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claims 14 and 15, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 16, Horbal discloses a method wherein the communication port is one of a standard serial or parallel communication port compatible with a personal computer (PC) and



Art Unit: 2153

wherein a connected PC handles communication with the Internet for receiving control code and data, and transfers the control code and data to the base station; see figs. 2-5.

As set forth in claim 17, Horbal discloses a control system for systems and appliances in a home or business area, comprising: a plurality of control units wired to sensors and actuators of individual ones of the systems and appliances, the control units having each a microcontroller, a system memory and I/O section; and an Internet site executing software enabling a subscriber associated with the home or business area to interact with the base station; characterized in that the Internet site software provides an interface for their subscriber to review status of systems and appliances having connected control units in the associated home or business area, and to enter control code and data addressed for individual ones of the control units in the home or business area; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45.

Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claims 17, 22, and 23, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claim 17, 22, and 23, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver

Art Unit: 2153

system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 18, Horbal discloses a control system wherein the base station comprises an Internet browser and an Internet-capable port for Internet access; see fig. 2.

As set forth in claim 19, Horbal discloses a control system wherein the base station has a standard serial or parallel port for connection to a personal computer, and the personal computer accomplishes necessary Internet browsing functions; see fig. 6-12.

As set forth in claim 20, Horbal discloses a control system wherein each control unit is configured to the base station by a specific address; see fig. 2, each appliance.

As set forth in claim 21, Horbal discloses a control system wherein the subscriber has a specific web page on the Internet site, wherein all configured, installed and active control units in the home or business area with which the subscriber is associated are indicated; see figs. 6-12.

As set forth in claim 24, Horbal discloses a method for managing control functions for a plurality of systems and appliances in a home or business area, comprising steps of: (a) connecting a control unit to each system or appliance, each control unit enabled to receive input from sensors and to actuate functions of the system or appliance to which it is connected; (b) identifying each

Art Unit: 2153

control unit uniquely electronically; (d) downloading control code and data from an Internet site by the base station identified for individual ones of the control units, and transmitting the downloaded control code and data selectively to the individual ones of the control units; and (e) providing a web site where a subscriber associated with the home or business area may access a web page having an interface for displaying status of each active control unit in the home or business area, and allowing the subscriber to enter functions and data for controlling the active control units in the home or business area; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claim 24, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claim 24, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by

Art Unit: 2153

Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

As set forth in claim 25, Horbal discloses an Internet subscription service having a system comprising a plurality of web pages specific to individual subscribers, and accessible interactively by the subscribers through any Internet appliance; characterized in that the system communicates for each web page and subscriber; see col. 8, lines 26-39, and element 406, see col. 5, lines 50-59 see col. 3, lines 31-45. Horbal discloses a system wherein the microservers can be placed on appliances, and other devices and the sensors then send information for control over the Internet to the browsers for control and interaction.

As set forth in claim 25, Horbal does not disclose a system wherein there is an RF section communicating with the microcontroller and memory for receiving programs and data. As set forth in claim 25, Sandelman discloses a system wherein sensors are placed on devices and can be monitored via RF devices through the Internet; see Col. 6, lines 47-57, col. 7, lines 9-31, and col. 7, lines 45-59, see fig. 610. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the microserver system of Horbal, with an RF section, as taught by Sandelman. The rationale is as follows: It would have been desirable to have provided means for remotely sending information to a control center. As Sandelman teaches the desirability of using an RF section, one of ordinary skill would have been motivated by Sandelman's teaching to have provided the system of Horbal, with an RF section, thereby having provided alternative means for communicating the data for remote observation and control.

Art Unit: 2153

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horbal et al. in view of Sandelman et al.

Horbal does not explicitly disclose having a base station enabled to identify and communicate with up to 256 control units selectively. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the of system of Horbal, with the ability to communicate with up to 256 control units. The rationale is as follows: It would have been desirable have the ability to communicate with multiple units. One of ordinary skill would have been motivated by the need to control multiple objects to have provided multiple control units to the system of Horbal thereby having provided the ability to monitor multiple systems.

#### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hoffberg (US 6,252,544) discloses a mobile communication device.

Periwal (US 6,163,776) discloses a system and method for exchanging data and commands between an object oriented system and relational system.

Jelen et al. (US 6,129,276) discloses a shopping cart mounted portable data collection device with tethered dataform reader.

Everson, Jr. et al. (US 5,512,890) discloses a sensor connection system.

Art Unit: 2153

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tod Kupstas whose telephone number is (703) 305-2655.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached at (703) 305-4792. The fax phone number for this art unit is (703) 308-7201. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 305-3900.

Tod Kupstas

  
2/8/2002

  
MOUSTAFAM. MEKY  
PRIMARY EXAMINER